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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/673,394 | 09/30/2003 | Christopher Evans | 19111.0127 | 1585 |

23517 7590 03/09/2007
BINGHAM MCCUTCHEN LLP
2020 K Street, N.W.
Intellectual Property Department
WASHINGTON, DC 20006

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| EXAMINER |
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CORRIELUS, JEAN M

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| ART UNIT | PAPER NUMBER |
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2162

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|----------------------------------------|------------|---------------|
| 3 MONTHS | 03/09/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/673,394 | EVANS ET AL. | |
| | Examiner | Art Unit | |
| | Jean M. Corrielus | 2162 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the office action filed on February 22, 2007, in which claims 1-7 are presented for further examination.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 22, 2007 has been entered.

Response to Arguments

3. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. Claim 1 is objected to because of the following informalities: claim 1,
line 3, after "step of", please delete "a.";
line 4, after "table:", please delete "b.";
line 5, after "join condition;", please delete "c."; and
line 7, after "the join; and", please delete "d.". Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The cited limitation ***“using the identifier to the at least one row of the detail table and that does not include the join; and processing the revised SQL statement that does not refer to the mater table”*** renders the claim indefinite because it was an attempt to claim the invention by excluding what the inventors did not invent rather than distinctly and particularly pointing out what they did invent. In re Schechter, 205 F.2d 185, 98 USPQ 144 (CCPA 1953). Applicant should duly note that any negative limitation or exclusionary proviso must have basis in the original disclosure. The mere absence of a positive recitation is not basis for an exclusion. Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a prima facie case for lack of descriptive support. Ex parte Parks, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993).

While rewriting a Structure Query Language (SQL) statement could reasonably be considered a tangible result, the body of claim 1 doesn't appear to actually support the preamble by including a step or steps, which accomplish that act. There is not steps or step of rewriting a SQL statement set forth in the claim.

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Claim 7 recites "a computer program product, comprising program code means stored on a computer readable medium for performing the method of claim 1 when said program is run on a computer". Applicant should duly note that "for performing the method of claim 1" is just intent to perform an action. However, there is actually no claimed element to perform. Such language in the claim is vague and indefinite.

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed. In particular, the claimed feature of ***"using the identifier to the at least one row of the detail table and that does not include the join; and processing the revised SQL statement that does not refer to the mater table"*** are not described in the specification to enable one having ordinary skill in the art to make and use the invention. The specification paragraph [0038] describes to prevent processing of a join between a master table and a detail table in a database it is important to equate the unique identifier to a row of the master table to an identifier to related rows of the detail table using the join condition. However, such detailed information mentions in the specification does not process the revised SQL statement that does not refer to the mater table. Based on the analysis provided above and substantial evidence or reasoning, the examiner

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provided that one having ordinary skilled in the art would not recognize in the disclosure a description of the invention defined by the claims. The limitation as claimed ***“using the identifier to the at least one row of the detail table and that does not include the join; and processing the revised SQL statement that does not refer to the mater table”*** are not supported by the as-filed disclosure, which is violated the written description requirement. In re Rasmussen, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981). Applicant should duly note that the first paragraph of 35 U.S.C. 112 requires that the “specification shall contain a written description of the invention”. Applicant should also note that the essential goal of the description of the invention requirement is to clearly convey the information that an applicant has invented the subject matter which is claimed; and to put the public in possession of what the applicant claims as the invention.” Furthermore, the written description requirement of the Patent Act promotes the progress of the useful arts by ensuring that patentees adequately describe their inventions in their patent specifications in exchange for the right to exclude others from practicing the invention for the duration of the patent's term. Indeed, the specification doe not satisfy the written description requirement because the specification does not describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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10. Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically, as directed to an abstract idea.

While rewriting a Structure Query Language (SQL) statement could reasonably be considered a tangible result, the body of claim 1 doesn't appear to actually support the preamble by including a step or steps, which accomplish that act.. Claim 1 appears to produce no tangible concrete, and useful result to form the basis statutory subject matter under 35 U.S.C 101.

Claim 7 recites "a computer program product, comprising program code means stored on a computer readable medium for performing the method of claim 1 when said program is run on a computer". Claim 7 is directed to an abstract idea without producing a tangible, concrete and useful result to form the basis statutory subject matter under 35 USC 101.

Remark

11. Applicants asserted Tow discloses the use of rewriting a query including a selective filter that would be expected to return only a very small percentage of the rows, however, Tow does not produce a revised SQL statement that only refers to the detail table using the identifier to the at least one row of the detail table and that does not include the join.. The examiner has carefully considered the subject matter as argued by the Applicant, the rejections advanced by the examiner, and the evidence of anticipation relied upon by examiner as support for the rejections. In rejecting the claims under 35 U.S.C. 102, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of anticipation and to provide substantial lines of evidence as to where each limitation is found in the prior art to arrive at the claimed invention. These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of anticipation. The examiner's position (detailed action's pages 1-5) with

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respect to the assertion above is that Tow discloses a system for reorganizing a structured Query language (SQL) statement to make an execution of the statement by a computer more efficient.

The examiner disagrees with the precedent assertion. It is important to note that the limitation the applicant is relied upon is not disclosed in the original disclosure. Moreover, Tow states that the direction of a join is to prevent an execution plan by discarding the only rows that would differ from the rows returned by the plain inner join. Applicant admitted that present invention is actually performed join operation when is needed but only when the join operations are prevented when they are unnecessary. Similarly, Tow discloses a system for reorganizing a structured Query language (SQL) statement by creating a data structure representation of a join statement (col.6, lines 5-52; col.7, lines 1-12). Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, as argued (page 3) by the applicant that present invention is relied on preventing unnecessary joins between table in a database, wherein using a new SQL statement would eliminate a join operation without filtering the results. The aforementioned assertion does not eliminate the join statement, in fact the new SQL statement would not filter the query result to eliminate the join statement.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-7 are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention. Tow (hereinafter “Tow”) US Patent no. 5,761,654.

As to claim 1, Tow discloses a system for reorganizing a structured Query language (SQL) statement to make an execution of the statement by a computer more efficient. In particular, Tow discloses the claimed “determining in the SQL statement a unique identifier to a row of the master table” a unique identifier (primary key) to a row of the master table defining relationship between tables (col.4, lines 41-48; col.7, lines 13-24); “equating the unique identifier to an identifier to related rows of the detail table using the join condition” using the join condition, the detail table A that has a foreign key match with a given primary key in the table B (col.6, lines 55-65), such primary key of a row in the table master is linked to the foreign key of a row in the detail table. Applicant should duly note the Akey represents a non-uniquely indexed foreign key (in table A) pointing at the primary key for table B (col.4, lines 51-67). Tow further discloses the claimed “producing a revised SQL statement that only refers to the detail table using the identifier to the at least one row of the detail table and that does not include the join” (col.7, lines 27-56; col.9, lines 32-35); and “processing the revised SQL statement that does not refer to the master table instead of the SQL statement that includes the loin (col.9, lines 56-58).

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As to claim 2, Tow discloses the claimed “wherein the unique identifier to a row of the matter table is indexed” (col.6, lines 47-48).

As to claim 3, Tow discloses the claimed “wherein the unique identifier to a row of the matter table is a primary key” (col.4, lines 47-48).

As to claim 4, Cheng discloses the claimed “wherein the unique identifier to a row of the detail table is a foreign key” (col.4, lines 49-50).

As to claim 5, Cheng discloses the claimed “wherein the join condition is an equality between a column of the master table and a column of the detail table” (col.6, lines 53-65; col.7, lines 1-11).

As to claim 6, Tow discloses a system performed by a computer for executing program of instructions (col.4, lines 36-38) to perform the steps of claim 1 as disclosed above.

As to claim 7, Tow discloses program of instructions stored in computer system (col.4, lines 36-38).

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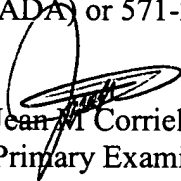
Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032.

The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jean M. Corrielus
Primary Examiner
Art Unit 2162

March 6, 2007